

Technical Data Sheet

Bridge Identification:	1810750000000R01
Facility Carried:	US 23
Feature Intersected:	Huron River
Location:	Ann Arbor
County:	Washtenaw
Region:	University
Year Built:	1956
Year Reconstructed:	1987
Bridge Type:	Two-Girder System
No. of Spans:	11
Deck Area:	41,700 S.F.
Paint System:	Type 4
Paint Area:	191,500 S.F.



Plan View Looking South (1)

Fracture Critical Members

1. Pin and Hanger Assemblies
2. Tension Areas of Main Girders

Fatigue Sensitive Details

1. Tack Welds on Gusset Plates
2. Floorbeam-to-Girder Connections
3. Lateral Bracing-to-Girder Connections

General Bridge Description

Bridge R01 of 81075 is an eleven-span steel beam and riveted steel plate girder bridge carrying U.S. Route 23 over the Huron River in the City of Ann Arbor in Washtenaw County. The five plate girder spans measure 98'-0", 118'-0", 122'-0", 118'-0", 98'-0" from south to north. At the south end there are six approach spans which range in length from 46'-6" to 77'-0". The overall length of the bridge is 916'-6". The out-to-out width of the deck is 90'-7", providing for three 12'-0" travel lanes and a 2'-0" shoulder in each direction. The bridge is supported by reinforced concrete abutments and rigid frame piers.

The floor system is comprised of longitudinal stringers and transverse floorbeams, which frame into the haunched plate girders along either edge of the bridge. Spans 8 and 10 contain 66'-0" long suspended spans which are supported by pin and hanger assemblies at the end of the plate girders cantilevered from Spans 7, 9 and 11.

The bridge was built in 1956 and rehabilitated in 1987, when the pins and hangers were replaced. The superstructure was painted in 1990.



Elevation (2)

Inspection Checklists

For additional information and detailed inspection procedures, refer to the Inspection and Maintenance Program section of this manual.

Fracture Critical Members/Fatigue Sensitive Details

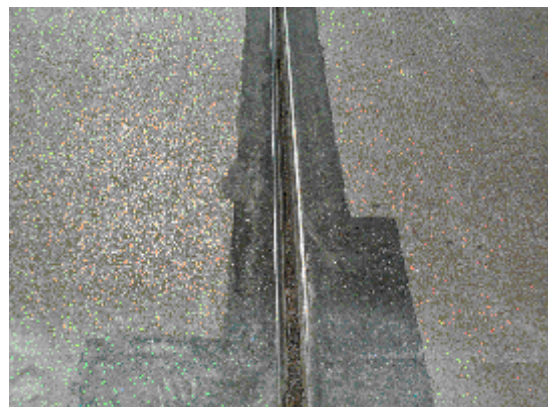
- ! Pin and hanger assemblies.** (Photo 3)
- ! Tension areas of main girders.** See Figure 1 in the Inspection and Maintenance Program section of this manual for tension areas of main girders.
- ! Floorbeam-to-girder connections.**
- ! Lateral bracing-to-girder connections.**
- ! Tack welds on gusset plates in various locations.**



Typical Pin and Hanger Assembly (3)

Other

- ! Expansion joints.** Monitor condition of these joints for leakage.



Expansion Joint (4)

- ! **Erosion.** Monitor any concrete erosion encountered near the centerline of the bridge at the North Abutment (Erosion can be caused by water leaking through longitudinal bridge deck joint). Compare with erosion documented in previous inspections.

- ! **Bearings.** Inspect the truss bearing assemblies, especially the pins, at the piers for signs of unusual wear or cracks. Inspect to ensure they are free to move as intended.

Maintenance Recommendations***Regularly Scheduled Maintenance Items***

Recommendation	Schedule
Clean bridge drainage system components (deck drains and downspouts).	6 to 12 months
Flush bridge deck joints and check for leaks.	12 months
Powerwash bridge superstructure.	12 months
Powerwash bearings and pin and hanger assemblies.	12 months